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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/829,415

04/21/2004

Mads Schenstrom Stefansen

684-011777-US (PAR)

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FAIRFIELD, CT 06824

EXAMINER

LE, DANH C

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/829,415

Applicant(s)

STEFANSEN, MADS  
SCHENSTROM

Examiner

DANH C. LE

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 11-15 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 11, 13-15, 25-29, 31 and 32 is/are rejected.
- 7) ☒ Claim(s) 5, 12 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 4/21/04 has been considered by the examiner and made of record in the application file.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-8, 11-15, 25-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24, respectively of U.S. Patent No. 6,900,981. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-24 of the U.S. Patent No. 6,900,981 encompass claims 1-8, 11-15, 25-32 of the present application.

**SET I**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**3. Claims 1-4, 8, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Slow (US 5,666,694).**

As to claim 1, Slow teaches a hinge for a mobile communications terminal comprising a first and a second section (figure 1 and col. 3, lines 11-22), said hinge comprising:

a first hinge member defining a first axis of rotation with the first section;

a second hinge member defining an offset second axis of rotation with the second section; and

synchronizing members which transfer rotational movement of the first section relative to the hinge to rotational movement of the second section relative to the hinge.

As to claim 2, Slow teaches a hinge as in claim 1, wherein the hinge comprises a hinge frame having a generally oval side profile and two parallel pin receiving holes (figure 4).

As to claim 3, Slow teaches a hinge as in claim 2, wherein the hinge frame comprises a recess for receiving the synchronizing members (figure 4).

As to claim 4, Slow teaches a hinge as in claim 1 wherein the synchronizing members comprise four conical or truncated conical gears connected to each other (figure 4).

As to claim 8, Slow teaches a hinge (figure 1 and col. 3, lines 11-22) comprising:  
a first hinge member defining a first axis of rotation with a first element connected to the hinge;

a second hinge member defining an offset second axis of rotation with a second element connected to the hinge; and

synchronizing members which transfer rotational movement of the first element relative to the hinge to rotational movement of the second element relative to the hinge.

As to claim 11, Slow teaches a hinge as in claim 8 wherein the synchronizing members comprises four conical or truncated conical gears connected to each other (figure 4).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### **4. Claims 6, 7, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slow in view of Tang (US 5,987,704).**

As to claim 6, Slow teaches a hinge as in claim 1, wherein the hinge comprises a hinge position of the second section relative to the first section at an intermediate

position between a fully closed position and a 360 degree fully open position. Slow fails to teach a hinge lock for locking position between two sections. Tang teaches a hinge lock for locking position between two sections (col.1, lines 53-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Tang into the system of Slow in order to hold a desire position a given angle of the rotation as Tang suggested.

As to claim 7, the combination of Slow and Tang teaches hinge as in claim 6, wherein the hinge lock comprises planar cut-outs on a partially cylindrical surface arranged between the two conical or truncated conical gears on the third hinge pin, said partial cylindrical surface being arranged in contact with a spring-loaded lock control part ( Tang figure 3, 6, 7).

As to claim 13, the limitation of the claims is the same limitation of claim 6;  
therefore, the claim is interpreted and rejected as set forth as claim 6.

As to claim 14, the limitation of the claims is the same limitation of claim 7;  
therefore, the claim is interpreted and rejected as set forth as claim 7.

**5. Claims 25-29, 31, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slow in view of Kim (US 6,259,897).**

As to claim 25, Slow teaches a mobile communications device (figure 1 and col. 3, lines 11-22) comprising:

- a housing;
- a keypad connected to the housing; and
- a display connected to the housing;

wherein the housing comprises a first section movably connected to a second section of the housing by a multiaxis hinge, wherein a first axis of rotation of the hinge is provided at the first section of the housing and a second offset axis of rotation of the hinge is provided at the second section of the housing, and wherein the hinge comprises means for synchronizing rotation of the first and second sections relative to the hinge through a . path of about 360 degrees.

Slow fails to teach a transceiver in the housing. Kim teaches a transceiver in the housing (figure 1, 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kim into the system of Slow in order to communicate to the remote user as Kim suggested.

As to claim 26, Slow teaches a mobile communications device as in claim 25 wherein the first and second sections comprise a first position with the keypad and display being closed by the first and second sections, a second position with the second section rotated about 180 degrees relative to the first section such that the first section is substantially inline with the second section and a hinge frame of the hinge, and a third position with the second section rotated about 360 degrees relative to the first section and having the keypad and display located on opposite exterior facing sides of the mobile communications device (figure 2a-2c).

As to claim 27, Slow teaches a mobile communications device as in claim 25 wherein the hinge comprises a hinge frame having a general oval side profile and two parallel pin receiving holes (figure 4).

As to claim 28, Slow teaches a mobile communications device as in claim 27 wherein the means for synchronizing rotation of the first and second sections relative to the hinge comprises gears connected to each other (figure 4).

As to claim 29, Slow teaches a mobile communications device as in claim 25 wherein the means for synchronizing the rotation of the first and second sections relative to the hinge comprises four conical or truncated conical gears connected to each other (figure 4).

As to claim 31, Slow teaches a mobile communications device as in claim 25 further comprising a flex circuit extending across the hinge and electrically connecting electronic circuitry in the first section to electronic circuitry in the second section (figure 1).

As to claim 32, the limitation of the claim is the same limitation of claim 7; therefore the claim is interpreted and rejected as set forth as claim 7.

## ***SET II***

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**6. Claims 1, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinser (US 4,825,395).**



As to claim 1, Kinser teaches a hinge for a mobile communications terminal comprising a first and a second section (figure 1-5), said hinge comprising:

a first hinge member defining a first axis of rotation with the first section;

a second hinge member defining an offset second axis of rotation with the second section; and

synchronizing members which transfer rotational movement of the first section relative to the hinge to rotational movement of the second section relative to the hinge.

As to claim 8, Kinser teaches a hinge (figure 1-5) comprising:

a first hinge member defining a first axis of rotation with a first element connected to the hinge;

a second hinge member defining an offset second axis of rotation with a second element connected to the hinge; and

synchronizing members which transfer rotational movement of the first element relative to the hinge to rotational movement of the second element relative to the hinge.

### ***Allowable Subject Matter***

Claims 5, 12, 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 5, 12, 30, the teaching of above prior arts either alone or in combination fails to teach further comprises a first and second hinge pin rotatably mounted in the pin receiving holes, each of the first and second hinge pins having one

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conical or truncated conical gear connected thereto, and each of the first or second hinge pins being rigidly connected to a respective one of the first and second sections and a third, transverse hinge pin having two conical or truncated conical gears connected thereto and rotatably mounted in connection to the conical or truncated conical gears of the first and second hinge pins so that rotational movement of the first hinge pin is transferred to the second hinge pin via the conical or truncated conical gears.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

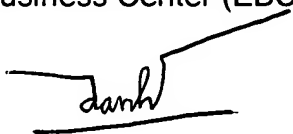
A. Kim (US 6,304,431) teaches portable computer system having ergonomic keyboard and detachable display unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "danh", with a horizontal line underneath it.

March 16, 2006

D. NH CONG LE  
PRIMARY EXAMINER